

Appendix C



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1b5v

Red - Deleted Information

Title **GDP-FUCOSE SYNTHETASE FROM ESCHERICHIA COLI COMPLEX WITH NADP**

Authors **Somers, W.S., Stahl, M.L., Sullivan, F.X.**

Primary Citation **Somers, W.S., Stahl, M.L., Sullivan, F.X. (1998) GDP-fucose synthetase from Escherichia coli: structure of a unique member of the short-chain dehydrogenase/reductase family that catalyzes two distinct reactions at the same active site. Structure 6: 1601-1612**

History Deposition **1996-08-31** Release **1999-08-26**

Experimental Method Type **X-RAY DIFFRACTION** Data **INA**

Parameters	Resolution (Å)	R-Value	R-Free	Space Group
	2.20	0.170 (obs.)	na	P 3₁ 2 1
Length (Å)	a	104.30	b	104.30
Angles (°)	alpha	90.00	beta	90.00
			gamma	74.90
Unit Cell				120.00

To view the 3D structure
click on one of the
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Images and Visualizations

Biological Molecule



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* Capable of displaying biological

Molecular Description Asymmetric Unit Polymer 1 Molecule **PROTEIN (GDP-FUCOSE SYNTHETASE)** Chain **A**

Classification

Source	Polymer 1	Scientific Name	Escherichia coli	Common Name	Bacteria	Expression system	Escherichia coli		
Ligand Chemical Component	Identifier	Name	Formula				Drug Similarity	Heptamer Similarity	Ligand Structure
	NDP	NADPH DIHYDRO-NICOTINAMIDE-ADENINE-DINUCLEOTIDE PHOSPHATE	C₂₁H₃₂N₇O₁₇P₃						
SCOP Classification (version 3.7)	Domain info	Class	Fold	Superfamily	Family	Domain	UDP-4-epimerase	UDP-4-epimerase	Spock
	d1b5v_a	Alpha and beta proteins (A/B)	NAD(P)-binding Rossmann-fold domains	NAD(P)-binding Rossmann-fold domains	Tyrosine-dependent oxidoreductases	UDP-4-epimerase	UDP-4-epimerase	UDP-4-epimerase	Spock
CATH Classification (version 3.1.0)	Domain	Class	Alpha beta	Architecture	Topology	Homology			
	1b5vA01	Alpha Beta		3-Layer (alpha) Sandwich	Rossmann fold	NAD(P) bind Rossmann-like			
	1b5vA02	Alpha Beta		Alpha-Beta Complex	UDP-galactose 4-epimerase, domain 1	UDP-galactose 4-epimerase, domain 1			
PFAM Classification	Chain	PFAM Accession	PFAM ID	Description	Type	Chain ID			
	A	PF01370		Epimerase	NAD dependent epimerase/dehydratase family	NADP_RosR			
GO Terms	Polymer	Molecular Function	Biological Process		Cellular Component				
	PROTEIN (GDP-FUCOSE SYNTHETASE) (1B5V A)	<ul style="list-style-type: none">catalytic activitycoenzyme binding	<ul style="list-style-type: none">cellular metabolic process		<ul style="list-style-type: none">none				

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